

Looking Towards the Future
West Lafayette Developing an Urban Forestry Master Plan

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In 2016, the City of West Lafayette and the West Lafayette Tree Friends obtained a grant to update its street tree inventory and explore maintenance goals for the City's urban forestry program. The contractor, Davey Resource Group, produced a document titled *Tree Management Plan*. This document includes the inventory update along with general maintenance recommendations, as well as industry long-term goals that West Lafayette could pursue adopting. This proposal also described the state of our urban forest, by highlighting specific tree maintenance needs and health of our aging canopy, and suggested planting strategies that could be added to the overall planting program the City and the West Lafayette Tree Friends currently administer.

The outcome of the street tree inventory included a total of 9,425 street trees and 129 stumps found in the city's right-of-way (ROW), with a heavy skew on younger trees at 8" DBH and smaller. West Lafayette's urban forest has an estimated replacement value of \$6.4 million, comprised of quantifiable economic, environmental, and social benefits and provides a return of \$1.20 per \$1.00 spend within the urban forestry program. The replacement value should only increase as the younger canopy matures. Also found from inventory totals, 30% of all street trees were from the same genus, maples (*Acer*). Having such a sizable percentage of one genus threatens the biodiversity of the community's urban forest, which could have a significant impact on its overall sustainability. Lastly, it was determined that the tree canopy coverage of West Lafayette only covers a total of 25% of all acreage within West Lafayette city limits. Under recommendations of Davey Resource Group, there are enough open spaces, both within ROW and other public/private land, to reach 72% canopy coverage, though funding and the current size of the program may not be able to achieve full coverage capacity.

In my role as West Lafayette's Neighborhood Vitality and Greenspace Administrator, I recognized the need for a comprehensive Urban Forestry Master Plan that continues the City's ongoing commitment to urban forestry for a more sustainable future. The Master Plan aims to address two primary goals: (1) Improving the utilization of West Lafayette's urban forest as green infrastructure, increasing the environmental and economic benefits to better address specific urban needs, such as the changing climate and storm water retention, and (2) Increasing overall tree canopy coverage from 25% to 40% by 2048. The following objectives all support the two primary goals:

- Promote preservation, planting, and proper care of trees and canopies on private property

- Increase partnerships for education and outreach efforts to all stakeholders to better understand the benefits of and strengthen advocacy for our community's urban forest
- Promote the urban forest as vital green infrastructure
- Innovate tree planting and preservation tactics in urban streetscapes and greenspace along roadways
- Ensure urban forestry management practices continue to improve and do not waiver

In the coming months, the City and the West Lafayette Tree Friends will be reaching out to residents of West Lafayette to hear your thoughts on our urban forest. Stay tuned for more information on how you can get involved!

In this map, red indicates an area with very little shade. The colors then range from yellow, orange, light green, blue, and dark blue. Dark blue indicates dense shade.

